

IN THE CLAIMS:

The following listing of claims replaces all prior versions and listings of claims in the present application.

Listing of Claims:

1. (Currently Amended) An exhaust gas purification apparatus for purifying exhaust gas exhausted from a diesel internal combustion engine and containing therein harmful substances including particulates, NO_x, HC and CO, at least, said exhaust gas purification apparatus comprising:

a removal part for trapping and removing particulates in the exhaust gas;

a purification part for catalytically purifying NO_x, HC and CO through contact; and

a heat transfer part for transferring heat generated in said removal part to said purification part, and heat transfer part being a container having an inner wall of conductive material and accommodating therein said removal part and said purification part each contacting said inner wall of said container so as to transfer heat generated in said removal part to said purification part.

2. (Currently Amended) An exhaust gas purification apparatus according to claim 1, wherein said ~~heat transfer part for transferring heat generated in said removal part is based on conduction, retention or radiation of the heat~~ container comprises a single heat conductor at an inner side thereof,

said single heat conductor contacting said removal part and said purification part.

3. (Currently Amended) An exhaust gas purification apparatus according to claim 1, wherein said removal part ~~for trapping and removing particulates in the exhaust gas employs~~ is a filter composed of porous material or metal material.

4. (Currently Amended) An exhaust gas purification apparatus according to claim 1, wherein said purification part ~~for purifying NO_x, HC, CO through contact is~~ comprises at least one of the following selected from the group consisting of a three-way catalyst, a firing combustion catalyst, a lean NO_x catalyst purifying NO_x in lean exhaust gas, an HC adsorption catalyst, [[or]] and an electric catalyst.

5. (Currently Amended) An exhaust gas purification apparatus according to claim 1, wherein said heat transfer part includes, at least inner wall of said containing a good heat conductor for transferring heat generated in said removal part conducts ~~(heat transfer)~~ and transfers the heat through [[a]] said good heat conductor.

6. (Currently Amended) An exhaust gas purification apparatus according to claim 1, wherein said removal part ~~for trapping and removing~~

~~particulates in the exhaust gas and said purification part for purifying NO_x, HC and CO through contact~~ are provided in [[a]] said container made of ~~material including good heat conductor~~ conductive material, without ~~intervening any a heat insulator~~ intervening between an inner wall surface of said container and an outer wall surface of said container, and the heat generated in said removal part is transferred to said purification part through said container.

7. (Currently Amended) An exhaust gas purification apparatus according to claim 1, wherein said heat transfer part ~~for transferring heat generated in said removal part uses~~ includes heat accumulating material in an inner wall portion of said container.

8. (Currently Amended) An exhaust gas purification apparatus according to claim 1, wherein said removal part ~~for trapping and removing particulates in the exhaust gas~~ and said purification part ~~for purifying NO_x, HC and CO through contact~~ are ~~constructed as~~ an integrated structure in which metal material is used as a metal substrate for said purification part.

9. (Currently Amended) An exhaust gas purification apparatus according to claim 1, wherein ~~said exhaust gas purification apparatus is arranged so that~~ said purification part is arranged at an upstream side of said

~~exhaust gas purification apparatus and said removal part is arranged at a downstream side thereof.~~

10. (Currently amended) An exhaust gas purification apparatus according to claim ~~[[1]]~~ 9, ~~said exhaust gas purification apparatus arranged so that said purification part is arranged at an upstream side of said exhaust gas purification apparatus and said removal part is arranged at a downstream side thereof, wherein in order to transfer the heat generated in said removal part for removing particulates to said purification part at the upstream side, an exhaust flow path is fluidly connected to an upstream side of said container at one end thereof and to a downstream side of said container at another end thereof so that exhaust gas including particulates combustion heat of particulates generated in said removal part is transferred to said purification part at the upstream side of said removal part.~~

11. (Currently Amended) An exhaust gas purification apparatus for purifying exhaust gas exhausted from a diesel internal combustion engine and containing therein harmful substances including particulates, NO_x, HC and CO, at least, said exhaust gas purification apparatus comprising:

a diesel particulate filter for trapping and removing particulates in the exhaust gas;

a catalyst for catalytically purifying the NO_x, HC and CO ~~through contact~~; and

a container of heat conductive member material for transferring heat generated in said diesel particulate filter to said catalyst, an entire inner wall surface of said container contacting with outer peripheral surfaces of said diesel particulate filter and said catalyst.

12. (Currently Amended) An exhaust gas purification system comprising:

an exhaust gas passage for flowing out exhaust gas exhausted from a diesel internal combustion engine, said exhaust gas passage being comprised of an inlet side exhaust path and outlet side exhaust path;

a removal part for trapping and removing particulates in the exhaust gas;

a purification part for purifying NO_x, HC and CO, included in the exhaust gas; and

a heat transfer part for transferring heat generated in said removal part to said purification part said heat transfer part including a container having an inner wall surface of heat conductive material connected by said inlet side exhaust path at an upstream side and by said downstream side exhaust path at a downstream side, and accommodating therein said removal part and said purification part so that said inner wall surface contacts both said removal part and said purification part to transfer the heat generated in said removal part to said purification part through said container,

~~wherein exhaust gas containing therein harmful substances including the NO_x, HC and CO at least is purified.~~

13. (Original) An exhaust gas purification system according to claim 12, wherein said exhaust gas purification system has a temperature raising part for heating exhaust gas from said diesel internal combustion engine and raising the temperature of the exhaust gas.

14. (New) An exhaust gas purification apparatus for purifying exhaust gas exhausted from a diesel internal combustion engine, comprising:

a filter for trapping and removing particulates contained in the exhaust gas from said diesel internal combustion engine;

a catalyst for catalytically purifying the exhaust gas passed through said filter; and

a container provided in an exhaust flow passage so that the exhaust gas from said diesel internal combustion engine flows through said container, said container having an inner wall surface of conductive material and accommodating therein only said filter and said catalyst so that said inner wall surface in its entirety is in contact with both said filter and said catalyst to transfer heat generated in said filter to said catalyst.